Amendments to the Claims:

Please cancel claims 1-16 as presented in the underlying International Application No. PCT/EP2004/051877 and add new claims 17-34 as shown in the listing of claims.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-16 (canceled).

Claim 17 (new): A scanning microscope comprising:

an excitation light beam configured to optically excite a first area of a specimen;

a stimulation light beam configured to trigger a stimulated emission or an additional excitation in a second area of the specimen, the second area at least partially overlapping with the first area of the specimen;

an objective configured to focus the excitation light beam and the stimulation light beam;

an optical component configured to influence a shape of a focus of at least one of the excitation light beam and the stimulation light beam; and

an optical system configured to image the optical component into a pupil of the objective and to adjust a size of an image of the optical component.

Claim 18 (new): The scanning microscope as recited in claim 17 wherein the optical system includes a movable focusing device.

Claim 19 (new): The scanning microscope as recited in claim 17 wherein the optical component is movably disposed.

Claim 20 (new): The scanning microscope as recited in claim 17 further comprising a motor configured to move at least one of the optical system and the optical component.

Claim 21 (new): The scanning microscope as recited in claim 17 the optical system includes a varifocal optical system.

Claim 22 (new): The scanning microscope as recited in claim 21 further comprising a motor configured to adjust the varifocal optical system.

Claim 23 (new): The scanning microscope as recited in claim 17 wherein the optical system is replaceable.

Claim 24 (new): The scanning microscope as recited in claim 23 further comprising a supply device configured to store a second optical system having a different optical property than the optical system.

Claim 25 (new): The scanning microscope as recited in claim 24 wherein the supply device includes at least one of a turret and a sliding carriage.

Claim 26 (new): The scanning microscope as recited in claim 24 further comprising a motor configured to drive the supply device.

Claim 27 (new): The scanning microscope as recited in claim 25 further comprising a motor configured to drive the supply device.

Claim 28 (new): The scanning microscope as recited in claim 17 wherein the optical system is configured to automatically adjust the size of the image of the optical component.

Claim 29 (new): The scanning microscope as recited in claim 17 wherein the optical system is configured to adjust the size of the image of the optical component as a function of a diameter of the pupil of the objective.

Claim 30 (new): The scanning microscope as recited in claim 17 wherein the optical component includes a phase-retarding plate.

Claim 31 (new): The scanning microscope as recited in claim 30 wherein the phase-retarding plate includes a $\lambda/2$ plate.

Claim 32 (new): The scanning microscope as recited in claim 30 wherein the phase-retarding plate is configured to achieve locally differing phase retardations in different areas.

Claim 33 (new): The scanning microscope as recited in claim 17 wherein the optical component is configured to act exclusively on the stimulation light beam.

Claim 34 (new): The scanning microscope as recited in claim 17 wherein the scanning microscope is at least one of a confocal scanning microscope and a double confocal scanning microscope.